

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-9. (Canceled)

1 10. (Previously Presented) A method for running an object-oriented
2 application on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 providing an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented application on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 determining if a particular object-oriented method to be invoked during
17 runtime execution is not present in executable program memory in the computer
18 hardware; and

19 loading the particular object-oriented method into the executable program
20 memory determined to not be present in the executable program memory prior to
21 its runtime execution.

1 11. (Previously Presented) The method of claim 10, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 12. (Previously Presented) The method of claim 10, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 13. (Previously Presented) The method of claim 10, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 14. (Previously Presented) The method of claim 10, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 15. (Previously Presented) The method of claim 10, which further
2 comprises:

3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 16. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running an object-oriented application on a
3 computer platform including computer hardware and an operating system
4 executing on the computer hardware, including program logic code specific to the
5 operating system and compiled for use on the computer hardware, the program
6 product performing the steps of:
7 providing an object-oriented interface specifying object-oriented classes
8 each containing one or more methods, on the computer platform, the interface
9 implemented on a plurality of computer platforms including different
10 combinations of computer hardware and operating systems, the interface used by
11 the same object-oriented application on the plurality of computer platforms to
12 instantiate objects from the classes and invoke the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 determining if a particular object-oriented method to be invoked during
18 runtime execution is not present in executable program memory in the computer
19 hardware; and
20 loading the particular object-oriented method into the executable program
21 memory determined to not be present in the executable program memory prior to
22 its runtime execution.

1 17. (Previously Presented) The computer program product of claim 16,
2 which further comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 18. (Previously Presented) The computer program product of claim 16,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 19. (Previously Presented) The computer program product of claim 16,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 20. (Previously Presented) The computer program product of claim 16,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 21. (Previously Presented) The computer program product of claim 16,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 22. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running an object-oriented application on a
3 computer platform including computer hardware and an operating system
4 executing on the computer hardware, including program logic code specific to the
5 operating system and compiled for use on the computer hardware, the program
6 product comprising:
7 program code to provide an object-oriented interface specifying object-
8 oriented classes each containing one or more methods, on the computer platform,
9 the interface implemented on a plurality of computer platforms including different
10 combinations of computer hardware and operating systems, the interface used by
11 the same object-oriented application on the plurality of computer platforms to
12 instantiate objects from the classes and invoke the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 program code to determine if a particular object-oriented method to be
18 invoked during runtime execution is not present in executable program memory in
19 the computer hardware; and
20 program code to load the particular object-oriented method into the
21 executable program memory determined to not be present in the executable
22 program memory prior to its runtime execution.

1 23. (Previously Presented) The computer program product of claim 22,
2 which further comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 24. (Previously Presented) The computer program product of claim 22,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 25. (Previously Presented) The computer program product of claim 22,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 26. (Previously Presented) The computer program product of claim 22,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 27. (Previously Presented) The computer program product of claim 22,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 28. (Previously Presented) A computer platform for running an object-
2 oriented application, including computer hardware and an operating system
3 executing on the computer hardware, including program logic code specific to the
4 operating system and compiled for use on the computer hardware, comprising:
5 a processor; and

6 a memory coupled to the processor, containing code which implements an
7 object-oriented interface specifying object-oriented classes each containing one or
8 more methods, on the computer platform, the interface implemented on a plurality
9 of computer platforms including different combinations of computer hardware
10 and operating systems, the interface used by the same object-oriented application
11 on the plurality of computer platforms to instantiate objects from the classes and
12 invoke the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 the memory programmed to determine if a particular object-oriented
18 method to be invoked during runtime execution is not present in executable
19 program memory in the computer hardware; and
20 the memory programmed to load the particular object-oriented method into
21 the executable program memory determined to not be present in the executable
22 program memory prior to its runtime execution.

1 29. (Previously Presented) The computer platform of claim 28, which
2 further comprises:

3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 30. (Previously Presented) The computer platform of claim 28 which
2 further comprises:

3 the particular object-oriented method being specific to the computer
4 platform.

1 31. (Previously Presented) The computer platform of claim 28, which
2 further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 32. (Previously Presented) The computer platform of claim 28, which
2 further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 33. (Previously Presented) The computer platform of claim 28, which
2 further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 34. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 loading code that implements an object-oriented interface specifying
7 object-oriented classes each containing one or more methods, on the computer
8 platform, the interface implemented on a plurality of computer platforms
9 including different combinations of computer hardware and operating systems, the
10 interface used by the same object-oriented program on the plurality of computer

11 platforms to instantiate objects from the classes and invoke the object-oriented
12 methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 the object-oriented program including a call to a particular object-oriented
18 method; and
19 loading code into the executable program memory that implements the
20 particular object-oriented method, if it is not yet loaded prior to its runtime
21 execution.

1 35. (Previously Presented) The method of claim 34, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 36. (Previously Presented) The method of claim 34, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 37. (Previously Presented) The method of claim 34, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 38. (Previously Presented) The method of claim 34, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 39. (Previously Presented) The method of claim 34, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 40. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 using an object-oriented interface specifying object-oriented classes each
7 containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;

16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;
18 the particular object-oriented method being loaded into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 41. (Previously Presented) The method of claim 40, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 42. (Previously Presented) The method of claim 40, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 43. (Previously Presented) The method of claim 40, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 44. (Previously Presented) The method of claim 40, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 45. (Previously Presented) The method of claim 40, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 46. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running an object-oriented program on a computer
3 platform including computer hardware and an operating system executing on the
4 computer hardware, including program logic code specific to the operating system
5 and compiled for use on the computer hardware, comprising:
6 program code for loading code that implements an object-oriented
7 interface specifying object-oriented classes each containing one or more methods,
8 on the computer platform, the interface implemented on a plurality of computer
9 platforms including different combinations of computer hardware and operating
10 systems, the interface used by the same object-oriented program on the plurality of
11 computer platforms to instantiate objects from the classes and invoke the object-
12 oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 the object-oriented program including a call to a particular object-oriented
18 method not present in executable program memory; and
19 program code for loading code into the executable program memory that
20 implements the particular object-oriented method, if it is not yet loaded prior to its
21 runtime execution.

1 47. (Previously Presented) The computer program product of claim 46,
2 which further comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 48. (Previously Presented) The computer program product of claim 46,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 49. (Previously Presented) The computer program product of claim 46,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 50. (Previously Presented) The computer program product of claim 46,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 51. (Previously Presented) The computer program product of claim 46,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 52. (Currently Amended) An object-oriented computer program
2 product embodied on a computer storage medium, to run on a computer platform
3 including computer hardware and an operating system executing on the computer
4 hardware, including program logic code specific to the operating system and
5 compiled for use on the computer hardware, comprising:
6 program code for using an object-oriented interface specifying object-
7 oriented classes each containing one or more methods, on the computer platform,
8 the interface implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 program code for calling with the object-oriented program, a particular
17 object-oriented method not present in executable program memory;
18 the particular object-oriented method being loaded into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 53. (Previously Presented) The computer program product of claim 52,
2 which further comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 54. (Previously Presented) The computer program product of claim 52,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 55. (Previously Presented) The computer program product of claim 52,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 56. (Previously Presented) The computer program product of claim 52,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 57. (Previously Presented) The computer program product of claim 52,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 58. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;
18 the particular object-oriented method being loaded into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 59. (Previously Presented) The method of claim 58, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 60. (Previously Presented) The method of claim 58, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 61. (Previously Presented) The method of claim 58, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 62. (Previously Presented) The method of claim 58, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 63. (Previously Presented) The method of claim 58, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 64. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;

12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory; and
18 causing the particular object-oriented method to be loaded into the
19 executable program memory, if it is determined to not be present in the executable
20 program memory prior to its runtime execution.

1 65. (Previously Presented) The method of claim 64, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 66. (Previously Presented) The method of claim 64, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 67. (Previously Presented) The method of claim 64, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 68. (Previously Presented) The method of claim 64, which further
2 comprises:

3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 69. (Previously Presented) The method of claim 64, which further
2 comprises:

3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 70. (Currently Amended) An object-oriented computer program
2 product embodied on a computer storage medium, to run on a computer platform
3 including computer hardware and an operating system executing on the computer
4 hardware, including program logic code specific to the operating system and
5 compiled for use on the computer hardware, the computer program product
6 comprising:

7 program code for invoking an object-oriented interface specifying object-
8 oriented classes each containing one or more methods, on the computer platform,
9 the interface implemented on a plurality of computer platforms including different
10 combinations of computer hardware and operating systems, the interface used by
11 the same object-oriented program on the plurality of computer platforms to
12 instantiate objects from the classes and invoke the object-oriented methods;

13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;

17 program code for invoking a particular object-oriented method not present
18 in executable program memory; and

19 program code for causing the particular object-oriented method to be
20 loaded into the executable program memory, if it is determined to not be present
21 in the executable program memory prior to its runtime execution.

1 71. (Previously Presented) The computer program product of claim 70,
2 which further comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 72. (Previously Presented) The computer program product of claim 70,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 73. (Previously Presented) The computer program product of claim 70,
2 which further comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 74. (Previously Presented) The computer program product of claim 70,
2 which further comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 75. (Previously Presented) The computer program product of claim 70,
2 which further comprises:

3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 76. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory, the method
18 programmed to obtain a particular one of the native operating system services;
19 and
20 causing the loading into the executable program memory of the particular
21 object-oriented method, if the particular method is determined to not be present,
22 wherein the particular object-oriented method invokes code specific to a
23 particular one of the plurality of computer platforms.

1 77. (Previously Presented) The method of claim 76, which further
2 comprises:
3 the particular object-oriented method being not present in the executable
4 program memory when the object-oriented program begins execution.

1 78. (Previously Presented) The method of claim 76, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 platform.

1 79. (Previously Presented) The method of claim 76, which further
2 comprises:
3 the particular object-oriented method being specific to the computer
4 hardware.

1 80. (Previously Presented) The method of claim 76, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware.

1 81. (Previously Presented) The method of claim 76, which further
2 comprises:
3 the particular object-oriented method being specific to the operating
4 system executing on the computer hardware and the program logic code being
5 responsive to the particular object-oriented method.

1 82. (Currently Amended) An object-oriented computer program
2 product embodied on a computer storage medium, to run on a computer platform
3 including computer hardware and an operating system executing on the computer
4 hardware, including program logic code specific to the operating system and
5 compiled for use on the computer hardware, the computer program product
6 comprising:
7 program code for invoking an object-oriented interface specifying object-
8 oriented classes each containing one or more methods, on the computer platform,
9 the interface implemented on a plurality of computer platforms including different
10 combinations of computer hardware and operating systems, the interface used by
11 the same object-oriented program on the plurality of computer platforms to
12 instantiate objects from the classes and invoke the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 program code for invoking a particular object-oriented method not present
18 in executable program memory, the method programmed to obtain a particular
19 one of the native operating system services; and
20 program code for causing the loading into the executable program memory
21 of the particular object-oriented method, if the particular method is determined to
22 not be present, wherein the particular object-oriented method invokes code
23 specific to a particular one of the plurality of computer platforms.

1 83. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code

4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 loading code that implements an object-oriented interface specifying
7 object-oriented classes each containing one or more methods, on the computer
8 platform, the interface implemented on a plurality of computer platforms
9 including different combinations of computer hardware and operating systems, the
10 interface used by the same object-oriented program on the plurality of computer
11 platforms to instantiate objects from the classes and invoke the object-oriented
12 methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 the object-oriented program including a call to a particular object-oriented
18 method not present in executable program memory, the method programmed to
19 obtain a particular one of the native operating system services; and
20 loading into the executable program memory the particular object-oriented
21 method, if the particular method is determined to not be present, wherein the
22 particular object-oriented method invokes code specific to a particular one of the
23 plurality of computer platforms.

1 84. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running an object-oriented program on a computer
3 platform including computer hardware and an operating system executing on the
4 computer hardware, including program logic code specific to the operating system
5 and compiled for use on the computer hardware, the computer program product
6 comprising:

7 program code for loading code that implements an object-oriented
8 interface specifying object-oriented classes each containing one or more methods,
9 on the computer platform, the interface implemented on a plurality of computer
10 platforms including different combinations of computer hardware and operating
11 systems, the interface used by the same object-oriented program on the plurality of
12 computer platforms to instantiate objects from the classes and invoke the object-
13 oriented methods;
14 the program logic code on any one of the plurality of computer platforms
15 being responsive to the object-oriented interface implemented on the one
16 computer platform to provide native operating system services from the one
17 computer platform;
18 the object-oriented program including a call to a particular object-oriented
19 method not present in executable program memory, the method programmed to
20 obtain a particular one of the native operating system services; and
21 program code for loading into the executable program memory the
22 particular object-oriented method, if the particular method is determined to not be
23 present, wherein the particular object-oriented method invokes code specific to a
24 particular one of the plurality of computer platforms.

1 85. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented library, including object-oriented classes each
7 containing one or more methods, on the computer platform, the library executable
8 on a plurality of computer platforms including different combinations of computer

9 hardware and operating systems, the library responsive to the execution of the
10 same object-oriented program on the plurality of computer platforms which
11 instantiates objects from the classes and invokes the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;
18 the particular object-oriented method being loaded into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 86. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one

14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;
18 the particular object-oriented method being copied into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 87. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;

18 the particular object-oriented method being transferred into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 88. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;
18 the particular object-oriented method being sent to the executable program
19 memory, if it is determined to not be present in the executable program memory
20 prior to its runtime execution.

1 89. (Previously Presented) A method for an object-oriented program
2 running on a computer platform including computer hardware and an operating

3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 invoking an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;

12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;

16 including a call in the object-oriented program, to a particular object-
17 oriented method not present in executable program memory;

18 the particular object-oriented method being placed into the executable
19 program memory, if it is determined to not be present in the executable program
20 memory prior to its runtime execution.

1 90. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 loading an object-oriented library, including object-oriented classes each
7 containing one or more methods, on the computer platform, the library executable
8 on a plurality of computer platforms including different combinations of computer

9 hardware and operating systems, the library responsive to the execution of the
10 same object-oriented program on the plurality of computer platforms which
11 instantiates objects from the classes and invokes the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform;
16 the object-oriented program including a call to a particular object-oriented
17 method not present in executable program memory, the method programmed to
18 obtain a particular one of the native operating system services; and
19 loading into the executable program memory the particular object-oriented
20 method, if the particular method is determined to not be present, wherein the
21 particular object-oriented method invokes code specific to a particular one of the
22 plurality of computer platforms.

1 91. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 copying code into executable program memory that implements an object-
7 oriented interface specifying object-oriented classes each containing one or more
8 methods, on the computer platform, the interface implemented on a plurality of
9 computer platforms including different combinations of computer hardware and
10 operating systems, the interface used by the same object-oriented program on the
11 plurality of computer platforms to instantiate objects from the classes and invoke
12 the object-oriented methods;

13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;
17 the object-oriented program including a call to a particular object-oriented
18 method not present in the executable program memory, the method programmed
19 to obtain a particular one of the native operating system services; and
20 copying into the executable program memory the particular object-oriented
21 method, if the particular method is determined to not be present, wherein the
22 particular object-oriented method invokes code specific to a particular one of the
23 plurality of computer platforms.

1 92. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 transferring code into executable program memory that implements an
7 object-oriented interface specifying object-oriented classes each containing one or
8 more methods, on the computer platform, the interface implemented on a plurality
9 of computer platforms including different combinations of computer hardware
10 and operating systems, the interface used by the same object-oriented program on
11 the plurality of computer platforms to instantiate objects from the classes and
12 invoke the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one

15 computer platform to provide native operating system services from the one
16 computer platform;
17 the object-oriented program including a call to a particular object-oriented
18 method not present in the executable program memory, the method programmed
19 to obtain a particular one of the native operating system services; and
20 transferring into the executable program memory the particular object-
21 oriented method, if the particular method is determined to not be present, wherein
22 the particular object-oriented method invokes code specific to a particular one of
23 the plurality of computer platforms.

1 93. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 sending code to executable program memory that implements an object-
7 oriented interface specifying object-oriented classes each containing one or more
8 methods, on the computer platform, the interface implemented on a plurality of
9 computer platforms including different combinations of computer hardware and
10 operating systems, the interface used by the same object-oriented program on the
11 plurality of computer platforms to instantiate objects from the classes and invoke
12 the object-oriented methods;
13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;

17 the object-oriented program including a call to a particular object-oriented
18 method not present in the executable program memory, the method programmed
19 to obtain a particular one of the native operating system services; and
20 sending to the executable program memory the particular object-oriented
21 method, if the particular method is determined to not be present, wherein the
22 particular object-oriented method invokes code specific to a particular one of the
23 plurality of computer platforms.

1 94. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 placing code into executable program memory that implements an object-
7 oriented interface specifying object-oriented classes each containing one or more
8 methods, on the computer platform, the interface implemented on a plurality of
9 computer platforms including different combinations of computer hardware and
10 operating systems, the interface used by the same object-oriented program on the
11 plurality of computer platforms to instantiate objects from the classes and invoke
12 the object-oriented methods;

13 the program logic code on any one of the plurality of computer platforms
14 being responsive to the object-oriented interface implemented on the one
15 computer platform to provide native operating system services from the one
16 computer platform;

17 the object-oriented program including a call to a particular object-oriented
18 method not present in the executable program memory, the method programmed
19 to obtain a particular one of the native operating system services; and

20 placing into the executable program memory the particular object-oriented
21 method, if the particular method is determined to not be present, wherein the
22 particular object-oriented method invokes code specific to a particular one of the
23 plurality of computer platforms.

1 95. (Previously Presented) A method for running object-oriented
2 software on a computer platform including computer hardware with executable
3 program memory and an operating system executing on the computer hardware,
4 the operating system compiled for use on the computer hardware, comprising:
5 running object-oriented software on a computer platform, the software
6 instantiating objects from classes and invoking object-oriented methods that
7 make requests for native operating system services from the computer platform;
8 invoking an object-oriented library on the computer platform, the invoking
9 being in order to call for native operating system services, the library including
10 object-oriented classes each containing one or more methods, the library available
11 for a plurality of computer platforms including different combinations of
12 computer hardware and operating systems, the library used by the same object-
13 oriented program on the plurality of computer platforms to instantiate objects
14 from the classes and invoke the object-oriented methods;
15 activating a program logic code specific to the operating system, the
16 activating being by the object-oriented library in response to the call for native
17 operating system services;
18 the object-oriented software including a call to a particular object-oriented
19 method not already present in the executable memory; and
20 causing the loading into the executable program memory of the particular
21 object-oriented method, if it is determined to not have been present in the
22 executable program memory prior to its runtime execution.

1 96. (Previously Presented) A method for running software on a
2 computer platform including computer hardware with executable program
3 memory and an operating system executing on the computer hardware, the
4 operating system compiled for use on the computer hardware, comprising:
5 running object-oriented software on a computer platform, the software
6 instantiating objects from classes and invoking object-oriented methods that
7 make requests for native operating system services from the computer platform;
8 invoking an object-oriented library on the computer platform, the invoking
9 being in order to call for native operating system services, the library including
10 object-oriented classes each containing one or more methods, the library available
11 for a plurality of computer platforms including different combinations of
12 computer hardware and operating systems, the library used by the same object-
13 oriented program on the plurality of computer platforms to instantiate objects
14 from the classes and invoke the object-oriented methods;
15 activating a program logic code specific to the operating system, the
16 activating being by the object-oriented library in response to the call for native
17 operating system services;
18 the object-oriented software including a call to a particular object-oriented
19 method not already present in the executable memory, the method to be called by
20 the object-oriented software to request a particular one of the native operating
21 system services; and
22 causing the loading into the executable program memory of the particular
23 object-oriented method, if it is determined to not have been present in the
24 executable program memory prior to its runtime execution.

1 97. (Previously Presented) A method for running software on a
2 computer platform including computer hardware with executable program

3 memory and an operating system executing on the computer hardware, the
4 operating system compiled for use on the computer hardware, comprising:
5 running object-oriented software on a computer platform, the software
6 instantiating objects from classes and invoking object-oriented methods that
7 make requests for native operating system services from the computer platform;
8 invoking an object-oriented library on the computer platform, the invoking
9 being in order to call for native operating system services, the library including
10 object-oriented classes each containing one or more methods, the library available
11 for a plurality of computer platforms including different combinations of
12 computer hardware and operating systems, the library used by the same object-
13 oriented program on the plurality of computer platforms to instantiate objects
14 from the classes and invoke the object-oriented methods;
15 attempting to invoke the operating system with the object-oriented library
16 in response to the call for native operating system services, by invoking a
17 particular object-oriented method not already present in the executable memory;
18 and
19 causing the loading into the executable program memory of the particular
20 object-oriented method, if it is determined to not have been present in the
21 executable program memory prior to its runtime execution.

1 98. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running object-oriented software on a computer
3 platform including computer hardware with executable program memory and an
4 operating system executing on the computer hardware, the operating system
5 compiled for use on the computer hardware, the computer program product
6 comprising:

7 program code for running object-oriented software on a computer
8 platform, the software instantiating objects from classes and invoking object-
9 oriented methods that make requests for native operating system services from the
10 computer platform;
11 program code for invoking an object-oriented library on the computer
12 platform, the invoking being in order to call for native operating system services,
13 the library including object-oriented classes each containing one or more methods,
14 the library available for a plurality of computer platforms including different
15 combinations of computer hardware and operating systems, the library used by the
16 same object-oriented program on the plurality of computer platforms to instantiate
17 objects from the classes and invoke the object-oriented methods;
18 a procedural program logic code specific to the operating system, being
19 activated by the object-oriented library in response to the call for native operating
20 system services;
21 program code for invoking a particular object-oriented method not already
22 present in the executable memory; and
23 program code for causing the loading into the executable program memory
24 of the particular object-oriented method, if it is determined to not have been
25 present in the executable program memory prior to its runtime execution.

1 99. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running software on a computer platform including
3 computer hardware with executable program memory and an operating system
4 executing on the computer hardware, the operating system compiled for use on the
5 computer hardware, the computer program product comprising:
6 program code for running object-oriented software on a computer
7 platform, the software instantiating objects from classes and invoking object-

8 oriented methods that make requests for native operating system services from the
9 computer platform;
10 program code for invoking an object-oriented library on the computer
11 platform, the invoking being in order to call for native operating system services,
12 the library including object-oriented classes each containing one or more methods,
13 the library available for a plurality of computer platforms including different
14 combinations of computer hardware and operating systems, the library used by the
15 same object-oriented program on the plurality of computer platforms to instantiate
16 objects from the classes and invoke the object-oriented methods;
17 a program logic code specific to the operating system, being activated by
18 the object-oriented library in response to the call for native operating system
19 services;
20 program code for invoking a particular object-oriented method not already
21 present in the executable memory, the method being invoked by the object-
22 oriented software to request a particular one of the native operating system
23 services; and
24 program code for causing the loading into the executable program memory
25 of the particular object-oriented method, if it is determined to not have been
26 present in the executable program memory prior to its runtime execution.

1 100. (Currently Amended) A computer program product embodied on a
2 computer storage medium, for running software on a computer platform including
3 computer hardware with executable program memory and an operating system
4 executing on the computer hardware, the operating system compiled for use on the
5 computer hardware, the computer program product comprising:
6 program code for running object-oriented software on a computer
7 platform, the software instantiating objects from classes and invoking object-

8 oriented methods that make requests for native operating system services from the
9 computer platform;
10 program code for invoking an object-oriented library on the computer
11 platform, the invoking being in order to call for native operating system services,
12 the library including object-oriented classes each containing one or more methods,
13 the library available for a plurality of computer platforms including different
14 combinations of computer hardware and operating systems, the library used by the
15 same object-oriented program on the plurality of computer platforms to instantiate
16 objects from the classes and invoke the object-oriented methods;
17 program code for attempting to invoke the operating system with the
18 object-oriented library in response to the call for native operating system services,
19 by invoking a particular object-oriented method not already present in the
20 executable memory; and
21 program code for causing the loading into the executable program memory
22 of the particular object-oriented method, if it is determined to not have been
23 present in the executable program memory prior to its runtime execution.

1 101. (Previously Presented) A computer platform for running object-
2 oriented software on a computer platform including computer hardware with
3 executable program memory and an operating system executing on the computer
4 hardware, the operating system compiled for use on the computer hardware,
5 comprising:
6 a processor; and
7 a memory coupled to the processor, containing program code which
8 implements object-oriented software on the computer platform, the software
9 instantiating objects from classes and invoking object-oriented methods that
10 make requests for native operating system services from the computer platform;

11 program code in the memory which implements an object-oriented library
12 on the computer platform, the invoking being in order to call for native operating
13 system services, the library including object-oriented classes each containing one
14 or more methods, the library available for a plurality of computer platforms
15 including different combinations of computer hardware and operating systems, the
16 library used by the same object-oriented program on the plurality of computer
17 platforms to instantiate objects from the classes and invoke the object-oriented
18 methods;
19 program logic code specific to the operating system in the memory,
20 activated by the object-oriented library in response to the call for native operating
21 system services;
22 program code in the memory to invoke a particular object-oriented method
23 not already present in the executable memory; and
24 program code in the memory to cause the loading into the executable
25 program memory of the particular object-oriented method, if it is determined to
26 not have been present in the executable program memory prior to its runtime
27 execution.

1 102. (Previously Presented) A computer platform for running object-
2 oriented software on a computer platform including computer hardware with
3 executable program memory and an operating system executing on the computer
4 hardware, the operating system compiled for use on the computer hardware,
5 comprising:
6 a processor; and
7 a memory coupled to the processor, containing program code which
8 implements object-oriented software on the computer platform, the software

9 instantiating objects from classes and invoking object-oriented methods that
10 make requests for native operating system services from the computer platform;
11 program code in the memory which implements an object-oriented library
12 on the computer platform, the invoking being in order to call for native operating
13 system services, the library including object-oriented classes each containing one
14 or more methods, the library available for a plurality of computer platforms
15 including different combinations of computer hardware and operating systems, the
16 library used by the same object-oriented program on the plurality of computer
17 platforms to instantiate objects from the classes and invoke the object-oriented
18 methods;

19 program logic code specific to the operating system in the memory,
20 activated by the object-oriented library in response to the call for native operating
21 system services;

22 program code in the memory to invoke a particular object-oriented method
23 not already present in the executable memory, the method being invoked by the
24 object-oriented software to request a particular one of the native operating system
25 services; and

26 program code in the memory to cause the loading into the executable
27 program memory of the particular object-oriented method, if it is determined to
28 not have been present in the executable program memory prior to its runtime
29 execution.

1 103. (Previously Presented) A computer platform for running object-
2 oriented software on a computer platform including computer hardware with
3 executable program memory and an operating system executing on the computer
4 hardware, the operating system compiled for use on the computer hardware,
5 comprising:

6 a processor; and
7 a memory coupled to the processor, containing program code which
8 implements object-oriented software on a computer platform, the software
9 instantiating objects from classes and invoking object-oriented methods that
10 make requests for native operating system services from the computer platform;
11 program code in the memory which implements an object-oriented library
12 on the computer platform, the invoking being in order to call for native operating
13 system services, the library including object-oriented classes each containing one
14 or more methods, the library available for a plurality of computer platforms
15 including different combinations of computer hardware and operating systems, the
16 library used by the same object-oriented program on the plurality of computer
17 platforms to instantiate objects from the classes and invoke the object-oriented
18 methods;
19 program code in the memory to attempt invoking the operating system
20 with the object-oriented library in response to the call for native operating system
21 services, by invoking a particular object-oriented method not already present in
22 the executable memory; and
23 program code in the memory to cause the loading into the executable
24 program memory of the particular object-oriented method, if it is determined to
25 not have been present in the executable program memory prior to its runtime
26 execution.

1 104. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:

6 providing an object-oriented interface specifying object-oriented classes
7 each containing one or more methods on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented interface implemented on the one
14 computer platform to provide native operating system services from the one
15 computer platform, which are requested by the object-oriented program;
16 determining if object-oriented methods to be invoked during runtime
17 execution are not present in executable program memory in the computer
18 hardware; and
19 loading the object-oriented methods into the executable program memory
20 determined to not be present in the executable program memory prior to their
21 runtime execution, where the loading occurs after the object-oriented program has
22 begun executing.

1 105. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware with executable
3 program memory and an operating system executing on the computer hardware,
4 including program logic code specific to the operating system and compiled for
5 use on the computer hardware, comprising:
6 running the object-oriented program on a computer platform, the program
7 instantiating objects from classes and invoking object-oriented methods that
8 make requests for native operating system services from the computer platform;

invoking with the object-oriented program, an object-oriented interface on the computer platform, the invoking being in order to call for native operating system services, the interface including object-oriented classes each containing one or more methods, the interface available for a plurality of computer platforms including different combinations of computer hardware and operating systems, the interface used by the same object-oriented program on the plurality of computer platforms to instantiate objects from the classes and invoke the object-oriented methods;

the program logic code on any one of the plurality of computer platforms being responsive to the object-oriented interface implemented on the one computer platform to provide native operating system services from the one computer platform, which are requested by the object-oriented program;

the object-oriented program attempting to invoke a particular object-oriented method not present in executable program memory, the method programmed to call the program logic code to obtain a particular one of the native operating system services; and

causing the loading into the executable program memory of the particular object-oriented method, if it is determined to not have been present in the executable program memory prior to the runtime execution of the program, where the loading occurs after the object-oriented program has begun executing.

106. (Previously Presented) A method for running an object-oriented program on a computer platform including computer hardware and an operating system executing on the computer hardware, including program logic code specific to the operating system and compiled for use on the computer hardware, comprising:

6 loading an object-oriented library, including object-oriented classes each
7 containing one or more methods, on the computer platform, the library executable
8 on a plurality of computer platforms including different combinations of computer
9 hardware and operating systems, the library responsive to the execution of the
10 same object-oriented program on the plurality of computer platforms which
11 instantiates objects from the classes and invokes the object-oriented methods;
12 the program logic code on any one of the plurality of computer platforms
13 being responsive to the object-oriented library implemented on the one computer
14 platform to provide native operating system services from the one computer
15 platform, which are requested by the object-oriented program;
16 the object-oriented program attempting to invoke a particular object-
17 oriented method not present in executable program memory, the method
18 programmed to call the program logic code to obtain a particular one of the native
19 operating system services; and
20 loading into the executable program memory the particular object-oriented
21 method, if the particular method is determined to not be present, wherein the
22 particular object-oriented method invokes code specific to a particular one of the
23 plurality of computer platforms, where the loading occurs after the object-oriented
24 program has begun executing.

1 107. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware with executable
3 program memory and an operating system executing on the computer hardware,
4 including program logic code specific to the operating system and compiled for
5 use on the computer hardware, comprising:

6 running the object-oriented program on a computer platform, the program
7 instantiating objects from classes and invoking object-oriented methods that
8 make requests for native operating system services from the computer platform;
9 invoking with the object-oriented program, an object-oriented interface on
10 the computer platform, the invoking being in order to call for native operating
11 system services, the interface including object-oriented classes each containing
12 one or more methods, the interface available for a plurality of computer platforms
13 including different combinations of computer hardware and operating systems, the
14 interface used by the same object-oriented program on the plurality of computer
15 platforms to instantiate objects from the classes and invoke the object-oriented
16 methods;
17 the program logic code on any one of the plurality of computer platforms
18 being responsive to the object-oriented interface implemented on the one
19 computer platform to provide native operating system services from the one
20 computer platform, which are requested by the object-oriented program;
21 the object-oriented program attempting to invoke a particular object-
22 oriented method not present in executable program memory, the method
23 programmed to call the program logic code specific to the hardware of the
24 computer platform, to obtain a particular one of the native operating system
25 services; and
26 causing the loading into the executable program memory of the particular
27 object-oriented method, if it is determined to not have been present in the
28 executable program memory prior to the runtime execution of the program, where
29 the loading occurs after the object-oriented program has begun executing.

1 108. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating

3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 loading an object-oriented library, including object-oriented classes each
7 containing one or more methods, on the computer platform, the library executable
8 on a plurality of computer platforms including different combinations of computer
9 hardware and operating systems, the library responsive to the execution of the
10 object-oriented program which instantiates objects from the classes and invokes
11 the object-oriented methods, the library used by the same object-oriented program
12 on the plurality of computer platforms to instantiate objects from the classes and
13 invoke the object-oriented methods;
14 the program logic code on any one of the plurality of computer platforms
15 being responsive to the object-oriented library implemented on the one computer
16 platform to provide native operating system services from the one computer
17 platform, which are requested by the object-oriented program;
18 the object-oriented program attempting to invoke a particular object-
19 oriented method not present in executable program memory, the method
20 programmed to call the program logic code specific to the hardware of the
21 computer platform to obtain a particular one of the native operating system
22 services; and
23 loading into the executable program memory the particular object-oriented
24 method, if the particular method is determined to not be present, wherein the
25 particular object-oriented method invokes code specific to a particular one of the
26 plurality of computer platforms, where the loading occurs after the object-oriented
27 program has begun executing.

1 109. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware with executable
3 program memory and an operating system executing on the computer hardware,
4 including program logic code specific to the operating system and compiled for
5 use on the computer hardware, comprising:

6 running the object-oriented program on a computer platform, the program
7 instantiating objects from classes and invoking object-oriented methods that
8 make requests for native operating system services from the computer platform;
9 invoking with the object-oriented program, an object-oriented interface on
10 the computer platform, the invoking being in order to call for native operating
11 system services, the interface including object-oriented classes each containing
12 one or more methods, the interface available for a plurality of computer platforms
13 including different combinations of computer hardware and operating systems, the
14 interface used by the same object-oriented program on the plurality of computer
15 platforms to instantiate objects from the classes and invoke the object-oriented
16 methods;

17 the program logic code on any one of the plurality of computer platforms
18 being responsive to the object-oriented interface implemented on the one
19 computer platform to provide native operating system services from the one
20 computer platform, which are requested by the object-oriented program;

21 the object-oriented program attempting to invoke an object-oriented
22 method not present in executable program memory to obtain a particular one of
23 the native operating system services, the method programmed to call the program
24 logic code specific to a corresponding one of the plurality of computer platforms,
25 to obtain the particular one of the native operating system services;

26 causing the identifying of a particular object-oriented method, which calls
27 program logic code specific to the hardware of the platform to obtain the
28 particular one of the native operating system services; and
29 causing the loading into the executable program memory of the particular
30 object-oriented method, if it is determined to not have been present in the
31 executable program memory prior to the runtime execution of the program, where
32 the loading occurs after the object-oriented program has begun executing.

1 110. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 loading an object-oriented library, including object-oriented classes each
7 containing one or more methods, on the computer platform, the library executable
8 on a plurality of computer platforms including different combinations of computer
9 hardware and operating systems, the library responsive to the execution of the
10 object-oriented program which instantiates objects from the classes and invokes
11 the object-oriented methods, the library used by the same object-oriented program
12 on the plurality of computer platforms to instantiate objects from the classes and
13 invoke the object-oriented methods;
14 the program logic code on any one of the plurality of computer platforms
15 being responsive to the object-oriented library implemented on the one computer
16 platform to provide native operating system services from the one computer
17 platform, which are requested by the object-oriented program;
18 the object-oriented program attempting to invoke an object-oriented
19 method not present in executable program memory to obtain a particular one of

20 the native operating system services, the method programmed to call the program
21 logic code specific to a corresponding one of the plurality of computer platforms,
22 to obtain the particular one of the native operating system services;
23 causing the identifying of a particular object-oriented method, which calls
24 program logic code specific to the hardware of the platform to obtain the
25 particular one of the native operating system services; and
26 loading into the executable program memory the particular object-oriented
27 method, if the particular method is determined to not be present, wherein the
28 particular object-oriented method invokes code specific to a particular one of the
29 plurality of computer platforms, where the loading occurs after the object-oriented
30 program has begun executing.

1 111. (Previously Presented) A method for running an object-oriented
2 program on a computer platform including computer hardware and an operating
3 system executing on the computer hardware, including program logic code
4 specific to the operating system and compiled for use on the computer hardware,
5 comprising:
6 providing an object-oriented interface specifying object-oriented classes
7 each containing one or more methods, on the computer platform, the interface
8 implemented on a plurality of computer platforms including different
9 combinations of computer hardware and operating systems, the interface used by
10 the same object-oriented program on the plurality of computer platforms to
11 instantiate objects from the classes and invoke the object-oriented methods;
12 the object-oriented interface including a designation as to which methods
13 invoke program logic code to provide native operating system services from the
14 computer platform;

15 the program logic code on any one of the plurality of computer platforms
16 being responsive to the object-oriented interface implemented on the one
17 computer platform to provide native operating system services from the one
18 computer platform;
19 determining if a particular object-oriented method to be invoked during
20 runtime execution is not present in executable program memory in the computer
21 hardware; and
22 loading the particular object-oriented method into the executable program
23 memory determined to not be present in the executable program memory prior to
24 its runtime execution.

1 112. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are thread services.

1 113. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are task services.

1 114. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are virtual memory services.

1 115. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are inter-process communication (IPC) services.

1 116. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are synchronization services.

1 117. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are scheduling services.

1 118. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are fault services.

1 119. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are processor and processor set services.

1 120. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are port services.

1 121. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are security services.

1 122. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are file system services.

1 123. (Previously Presented) The method of claim 10, wherein the native
2 operating system services are graphical user interface (GUI) services.